

WHAT IS CLAIMED IS:

1. A glass for substrate, which consists, as represented by mass percentage, essentially of:

	SiO <sub>2</sub>	40 to 59%,
5	Al <sub>2</sub> O <sub>3</sub>	5 to 20%,
	B <sub>2</sub> O <sub>3</sub>	0 to 8%,
	MgO	0 to 10%,
	CaO	0 to 12%,
	SrO	2 to 20%,
10	BaO	0 to 2%,
	ZnO	0 to 4%,
	Li <sub>2</sub> O	0 to 2%,
	Na <sub>2</sub> O	0 to 10%,
	K <sub>2</sub> O	0 to 12%,
15	TiO <sub>2</sub>	0 to 10%, and
	ZrO <sub>2</sub>	0 to 5%,

wherein MgO+CaO+SrO+BaO is at least 15%.

2. The glass for substrate according to Claim 1, wherein Al<sub>2</sub>O<sub>3</sub>+TiO<sub>2</sub> is at least 11%.

20 3. The glass for substrate according to Claim 1, wherein BaO+Li<sub>2</sub>O+Na<sub>2</sub>O+K<sub>2</sub>O is at most 14%.

4. The glass for substrate according to Claim 2, wherein BaO+Li<sub>2</sub>O+Na<sub>2</sub>O+K<sub>2</sub>O is at most 14%.

25 5. The glass for substrate according to Claim 4, wherein Li<sub>2</sub>O+ZnO is at most 2%.

6. The glass for substrate according to Claim 1, wherein Li<sub>2</sub>O+ZnO is at most 2%.

7. The glass for substrate according to Claim 1, which has an average linear expansion coefficient of at least  $70 \times 10^{-7}/^{\circ}\text{C}$  within a range of from 50 to  $350^{\circ}\text{C}$ .

8. The glass for substrate according to Claim 1, which  
5 has a glass transition temperature of at least  $600^{\circ}\text{C}$ .

9. A glass substrate made of the glass for substrate as defined in Claim 1, wherein the number of attachments having sizes of at least  $10\text{ }\mu\text{m}$  present on the surface of the glass substrate held in a steam atmosphere at  $120^{\circ}\text{C}$   
10 under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the number of attachments having sizes of from  $1\text{ }\mu\text{m}$  to less than  $10\text{ }\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

10. A glass substrate made of the glass for substrate as defined in Claim 2, wherein the number of attachments  
15 having sizes of at least  $10\text{ }\mu\text{m}$  present on the surface of the glass substrate held in a steam atmosphere at  $120^{\circ}\text{C}$  under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the number of attachments having sizes of from  $1\text{ }\mu\text{m}$  to less than  $10\text{ }\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

20 11. A glass substrate made of the glass for substrate as defined in Claim 3, wherein the number of attachments having sizes of at least  $10\text{ }\mu\text{m}$  present on the surface of the glass substrate held in a steam atmosphere at  $120^{\circ}\text{C}$  under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the  
25 number of attachments having sizes of from  $1\text{ }\mu\text{m}$  to less than  $10\text{ }\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

12. A glass substrate made of the glass for substrate as

defined in Claim 4, wherein the number of attachments  
having sizes of at least 10  $\mu\text{m}$  present on the surface of  
the glass substrate held in a steam atmosphere at 120°C  
under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the  
5 number of attachments having sizes of from 1  $\mu\text{m}$  to less  
than 10  $\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

13. A glass substrate made of the glass for substrate as  
defined in Claim 5, wherein the number of attachments  
having sizes of at least 10  $\mu\text{m}$  present on the surface of  
10 the glass substrate held in a steam atmosphere at 120°C  
under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the  
number of attachments having sizes of from 1  $\mu\text{m}$  to less  
than 10  $\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

14. A glass substrate made of the glass for substrate as  
15 defined in Claim 7, wherein the number of attachments  
having sizes of at least 10  $\mu\text{m}$  present on the surface of  
the glass substrate held in a steam atmosphere at 120°C  
under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the  
number of attachments having sizes of from 1  $\mu\text{m}$  to less  
20 than 10  $\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .

15. A glass substrate made of the glass for substrate as  
defined in Claim 8, wherein the number of attachments  
having sizes of at least 10  $\mu\text{m}$  present on the surface of  
the glass substrate held in a steam atmosphere at 120°C  
25 under 2 atm for 20 hours, is not more than  $1/\text{cm}^2$ , and the  
number of attachments having sizes of from 1  $\mu\text{m}$  to less  
than 10  $\mu\text{m}$  so present, is not more than  $10^5/\text{cm}^2$ .